REMARKS

Claims 1-6 are presently in the application.

Claim 1 has been amended to recite "whereby, when the disk brake is actuated, a frictional or braking force exerted in the circumferential direction to the brake disc on the friction brake lining by the rotating brake disk is transmitted to the brake bracket and is not transmitted to the caliper guide." The support for the amendment is found in para. [0010] of the specification.

Reconsideration of the rejection of claims 1-6 under 35 USC 103(a) as unpatentable over Baumann et al (WO 02/10609) in view of Burgdorf (US 4,375,250) is respectfully requested. Claim 1 is directed to a disk brake (10) with mechanical self-boosting for use in motor vehicles, comprising a brake bracket (12), a floating caliper (22), a caliper guide (24) which guides the caliper transversely displaceably on the brake bracket (12), an actuating unit (32, 34) with which a friction brake lining (18, 20) can be pressed against a brake disk (16), and having a self-boosting mechanism (40, 46) which increases a contact-pressure force of the friction brake lining against the brake disk, **the self-boosting mechanism (40, 46) having one brace (52) in a circumferential direction to the brake disk (16) on the brake bracket (12)** and another brace (28) transversely to the brake disk (16) on the caliper (22), **whereby, when the disk brake is actuated, a frictional or braking force exerted in the circumferential direction to the brake disc on the friction brake lining by the rotating brake disk is transmitted to the brake bracket and is not transmitted to the caliper guide.**

As explained in applicants' specification, when a disk brake of the prior art is actuated, a frictional force exerted in the circumferential direction on the friction brake lining by the rotating brake disk is introduced into the caliper via the ramp, and it must be transmitted from the caliper guide to the brake bracket or some other fixed component. This force acts transversely to the caliper guide. The caliper guide must be dimensioned so as to be adequately stable for transmitting the frictional force exerted by the rotating brake disk on the friction brake lining. At the same time, the force to be transmitted from the caliper guide upon braking impairs smooth running of the caliper guide. Specifically, the caliper guide becomes sluggish or hard to move. Applicants' invention has the advantage that the self-boosting mechanism is braced in a circumferential direction to the brake disk on the brake bracket and not on the caliper. As a result, a frictional or braking force exerted, when the disk brake is actuated, in the circumferential direction on the friction brake lining by the rotating brake disk is transmitted to the brake bracket and does not put a load on the caliper guide. The caliper guide is substantially free of force; in particular, it need not transmit the high braking forces that occur during braking. As a result, the caliper guide can be comparatively small, and its smooth running is unimpaired by forces exerted on it. Another advantage is easier restoration of the caliper after a brake actuation, and in particular easier adjustment of the air clearance, which is due to the smooth running of the caliper guide. In addition, reduced brake lining wear when the disk brake is unactuated can be expected.

Baumann et al teaches a disc brake comprising a caliper 12, an actuating unit 16, and a self-boosting mechanism (46, 48, 50 52). Baumann lacks any teaching or suggestion of a self-

boosting mechanism having one brace in a circumferential direction to the brake disk on the brake bracket. In fact, no brake bracket is shown in Baumann et al. Unlike the claimed subject matter, in Baumann, the self-boosting mechanism is braced in a circumferential direction to the brake disk on the brake caliper 12.

Burgdorf discloses a disc brake in which the frictional force exerted in the circumferential direction on the friction brake lining by the rotating brake disk is introduced into the caliper via the levers 11, 11'. The levers 11, 11' transmit the force, with one force component perpendicular to the brake disc and with one force component parallel to the brake disc, to the brake pistons 12, 12', the cylinder 28, and the brake caliper 25. The brake caliper 25 is braced on the brake holder 14 displaceably transversely to the brake disc. The braking force acting in the circumferential direction of the brake disc is consequently transmitted to the brake caliper 25 and by it to the brake caliper guide, which displaceably guides the floating brake caliper 25 transversely to the brake disc, to the brake holder 14. The brake caliper guide is loaded with the braking force. This has the disadvantage that the brake caliper guide becomes sluggish or hard to move. In addition, the brake caliper guide must be dimensioned so as to be adequately stable for transmitting the frictional force exerted by the rotating brake disk on the friction brake lining.

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Neither Baumann et al nor Burgdorf teaches or suggests a disc brake of the type recited in claim 1 in which the self-boosting mechanism has one brace in a circumferential direction to

the brake disk on the brake bracket, whereby, when the disk brake is actuated, a frictional or braking force exerted in the circumferential direction to the brake disc on the friction brake lining by the rotating brake disk is transmitted to the brake bracket and is not transmitted to the caliper guide. Accordingly, claim 1 and claims 2-6, dependent on claim 1, are not rendered obvious by the combined teachings of Baumann et al and Burgdorf.

Entry of the amendment and allowance of the claims is respectfully requested.

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